

REMARKS

Status of Claims:

Claim 2 is cancelled. Thus, claim 1 is present for examination.

Indefiniteness Rejection:

Claims 1-2 stand rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to point out what is included or excluded by the claim language.

With regard to claim 1, as amended, the rejection is respectfully traversed.

The Examiner stated that the “if any” statement in claim 1 does not define any structure in the claim.

Claim 1 has been amended, and the “if any” statement has been removed from claim 1. Thus, claim 1 is now believed to comply with the requirements of 35 U.S.C. 112, second paragraph.

Prior Art Rejection:

Claims 1-2 stand rejected under 35 U.S.C. 102(a) as being anticipated by Applicant’s Admitted Prior Art (AAPA), figures 1-3.

With regard to claim 1, as amended, the rejection is respectfully traversed.

Independent claim 1, as amended, recites a process used in fabricating a liquid crystal display, comprising the steps of:

- “a) preparing a substrate having a major surface;
- b) patterning a first conductive material layer into plural gate layers and plural storage electrode layers on said major surface;
- c) covering said plural gate layers and said plural storage electrode layers with a gate insulating layer;
- d) patterning an amorphous silicon layer into plural amorphous silicon layers on said gate insulating layer;

- e) selectively etching said gate insulating layer together with pieces of residual amorphous silicon to form plural bent contact slits in said gate insulating layer;
- f) patterning a second conductive material layer into plural drain layers and plural source layers; and
- g) patterning a transparent material layer into pixel electrodes respectively held in contact with said plural source layers;

wherein a first bent contact slit of said plural bent contact slits is formed by etching said gate insulating layer together with pieces of said residual amorphous silicon from a top portion of said gate insulating layer through said gate insulating layer to said major surface of said substrate between a first gate layer of said plural gate layers and a first area where a first drain layer of said plural drain layers adjacent to said first gate layer is patterned, and by etching said gate insulating layer together with pieces of said residual amorphous silicon from said top portion of said gate insulating layer through said gate insulating layer to said major surface of said substrate between said first area where said first drain layer is patterned and a first storage electrode layer of said plural storage electrode layers adjacent to said first area." (Emphasis Added)

A process for fabricating a liquid crystal display including the above-quoted steps has the advantage that a gate insulating layer is selectively etched to form a bent contact slit that extends from a top portion of the gate insulating layer through the gate insulating layer to a surface of a substrate. A first portion of the bent contact slit is formed between a gate layer and an area where an adjacent drain layer is patterned and a second portion of the bent contact slit is formed between the area where the drain layer is patterned and an adjacent storage electrode layer. Such a bent contact slit is effective against a short circuit between the gate layer and the drain layer and is effective against a short circuit between the gate layer and the storage electrode layer. (Specification; paragraph [0049]; FIG. 18, reference numbers 2, 8, 12, and 13).

AAPA neither discloses nor suggests a process for fabricating a liquid crystal display in which a gate insulating layer is etched to form a bent contact slit extending from a top portion of the gate insulating layer to a substrate where a first portion of the bent contact slit is formed between a gate layer and an area where an adjacent drain layer is patterned and a second portion of the bent contact slit is formed between the area where the drain layer is

patterned and an adjacent storage electrode layer. (see FIGs. 3 and 13). The prior art device of FIG. 3 does not have a contact slit between a gate pattern and an adjacent drain pattern. (Specification; paragraph [0013]; FIG. 3, reference numbers 2, 6, and 8). Similarly, the prior art device of FIG. 13 does not have a contact slit between a gate pattern and an adjacent drain pattern. (Specification; paragraph [0014]; FIG. 13, reference numbers 2, 8, and 16).

Therefore, independent claim 1, as amended, is neither disclosed nor suggested by AAPA and, thus, is believed to be allowable.

Conclusion:

Applicant believes that the present application is now in condition for allowance. Favorable reconsideration of the application as amended is respectfully requested.

The Examiner is invited to contact the undersigned by telephone if it is felt that a telephone interview would advance the prosecution of the present application.

The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 C.F.R. §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 19-0741. Should no proper payment be enclosed herewith, as by a check being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 19-0741.

If any extensions of time are needed for timely acceptance of papers submitted herewith, Applicant hereby petitions for such extension under 37 C.F.R. §1.136 and authorizes payment of any such extensions fees to Deposit Account No. 19-0741.

Respectfully submitted,

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